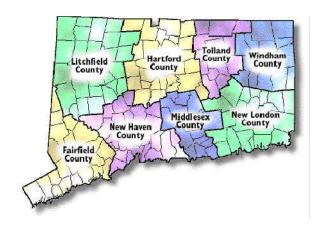


CONFERENCE BOARD

Report to the Governor and General Assembly

1999



THE CONNECTICUT ECONOMIC CONFERENCE BOARD: ANNUAL REPORT 1999

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Connecticut Economic Conference Board

Executive Summary

In order to fulfill its legislative mandate, the Connecticut Economic Conference Board held a public hearing on November 20, 1998. Economic experts and representatives of the public and private sectors provided input. The following is a summary highlighting major issues raised during the course of the day.

Connecticut s Economy

Jobs-Job growth was relatively flat through the third quarter of 1998. Major factors affecting job growth include a lack of qualified workers and the effect of the Asian financial crisis. Connecticut's unemployment rate is below 4% meaning that most workers are already employed. Those who are not often lack the required skills. The ability to develop, attract, and retain workers is critical for Connecticut's economic well-being going forward.

Within the state, jobs in manufacturing continued to decline through the third quarter of 1998, and growth in manufacturing jobs are expected to be flat or negative going forward. Our major job growth has and will come from services and trade. Finance, insurance, and real estate (FIRE) is also an important sector for Connecticut. Although this industry has done well recently, it is continuing to consolidate and will experience further job reductions.

High Incomes-Income continues to be an area of strength for Connecticut. Personal income is 43% higher than the national average. In particular, Connecticut residents benefit from high wages in manufacturing and FIRE. Wages in trade and services are rising as well. Connecticut has continued to grow high value-added, high income jobs and to reap the benefits of job diversification. Within the state, however, income is unevenly distributed. Nevertheless, the current strong job market and demand for workers is providing opportunities for previously unemployed and under-employed individuals.

Strong Output-Real gross state product (GSP) declined during the recession in 1989 through 1992. From 1993 through 1998, however, in spite of job losses, GSP increased, although it lagged growth in gross domestic product (GDP). Since 1988, Connecticut's GSP increased by 10% while GDP increased by 20%. The fact that state output is rising, although jobs are not increasing, shows the efficiency of Connecticut workers.

The U.S. Economy

Lower Earnings Going Forward-The tight labor market is narrowing profit margins. At the same time, operating rates are declining due to excess capacity. Although revenue growth has slowed dramatically over the last several years because of deflation and loss of market share to foreign competition, companies have still reported strong earnings per

share. During the next four quarters, economic data suggest that companies will probably not enjoy the double digit earnings gains they have come to expect. This will create vulnerability for the stock market and the U.S. economy overall.

Excessive Borrowing-Consumer durable and housing expenditures are at a record share of GDP. Currently, consumers have heavy debt burdens, and consumer spending will not offset shocks or weaknesses occurring elsewhere in the economy. In aggregate, consumers spend more than their incomes. They borrow against retirement savings and other assets to maintain their spending at a record level. This is the first time in the postwar period that we have had a negative consumer saving rate.

The Asian Financial Crisis-Although the financial crisis in Asia is beginning to stabilize, it is doing so at a low level. The banking systems of many Asian countries including Japan, Korea, Indonesia, and Malaysia are over-leveraged and insolvent. Demand has declined dramatically in these countries, combined with a worldwide problem of excess capacity.

Imports have grown rapidly and have taken a larger share of the U.S. economy. Simultaneously, exports have slumped because many of our traditional customers have experienced financial shocks. The U.S. trade deficit will be at an all-time high in 1999. Due to price declines, American companies will have much difficulty competing internationally. At the same time, they will continue to lose domestic market share to foreign competitors. Going forward, the U.S. needs an export-oriented strategy to balance trade, a strategy not currently in place at the national level.

Excess Capacity-To date, the employment and income effect of the trade deficit has been offset by strong growth in domestic demand. Business investment spending has been high, particularly as many companies incorporate new technologies. Currently, manufacturing capacity in the U.S. is growing at 5% per year, well above the sustainable rate. At the same time, domestic and foreign sales are affected by foreign competition and lack of demand in foreign markets. As a result, a growing problem of excess capacity exists as the operating rates of manufacturers have declined for the last 12 to 15 months. If businesses cut investment spending to slow growth in capacity, it will lead to layoffs and to declines in consumer confidence. This, in turn, will drop consumer spending, placing profits, employment, and the stock market at risk.

No Recession-Although a slowing of the national and state economies is likely in 1999, no one sees a recession. We will, however, see reduced spending in consumer and capital goods. The Asian financial crisis will continue to take a toll. Profits and employment growth will probably slow. Some industries, however, particularly pharmaceuticals, internet companies, software companies, and telecommunications will continue to flourish, because they rely more heavily on U.S. markets where demand is strong versus foreign markets.

1998: Actual vs. Forecast

At the time of the November 20 meeting, a number of global and domestic developments clouded the forecast for year-end 1998 and the start of 1999. To be specific, there was real concern about the effect of the Asian financial crisis on exports and corporate earnings. In addition, many economists were concerned that stock market volatility in the fall of 1998 would lead to a loss in consumer confidence and a decline in spending. Since November, however, several events have contributed to a more favorable economic picture and more optimistic forecasts for 1999.

First, although the Asian financial crisis is still a concern, there is growing evidence that some of the affected countries are implementing required financial system reforms and are on the road to recovery. Second, the Federal Reserve cut interest rates three times in the fall of 1998, calming domestic anxiety and leading to a stock market rally that has now taken the Dow beyond the 10,000 mark. Finally, actual performance for 1998 at both the state and national level, exceeded forecasts, and the first quarter of 1999 shows signs of continued strength. Table 1 highlights actual performance versus forecast.

Table 1
Key Connecticut and U.S. Economic Indicators

	1997	1998	1998	1999	2000
	Actual	Forecast	Actual	Forecast	Forecast
Employment (000)	1,616	1,642	1,648	1,644	1,653
%change	2.1%	1.6%	2.0%	0.1%	0.5%
Population (000)	3,270	3,275	3,274*	3,280	3,285
%change	0.1%	0.2%	0.1%	0.2%	0.2%
Unemployment %	5.1%	4.0%	3.4%	4.2%	4.4%
Housing Permits (000)	9.31	11.04	11.54	8.93	8.79
%change	9.1%	18.6%	27.5%	-19.2%	-1.5%
CT Gross State Product (1992 billions) %change	118.0 4.4%	121.0 2.5%	121.5* 3.0%	122.0 0.8%	125.0 2.5%
US Gross Domestic Product (1992 billions)	7,269.8	7,524.2	7,552.1	7,665.4	7,834.0
%change	3.9%	3.5%	3.9%	1.5%	2.2%

Sources: New England Economic Project 10/98

CT Dept. of Labor, Labor Situation

CT Dept. of Economic and Community Development

US Bureau of Economic Analysis

OECD

As can be seen from Table 1, both employment and output exceeded the forecast for Connecticut for 1998. Momentum from a strong fourth quarter has carried through into 1999 as well, highlighting the importance of workforce development as the key issue for the state. We cannot expect continued strong growth without sufficient workers with the desired skills.

^{*}estimated by DECD-Research

Progress on the Industry Clusters Initiative

The Governor's Council on Economic Competitiveness-The Governor's Council on Economic Competitiveness, being appointed, will oversee the continued progress of the Industry Clusters Initiative. Council members will include leaders from business, hospitals and health care, higher education, and the state legislature. Advisory Councils will also be appointed.

Current clusters include financial services, telecommunications, high tech, manufacturing, health services, and tourism. Additional clusters are emerging. The Department of Community and Economic Development (DECD) continues to work with Professor Michael Porter from Harvard on the Initiative for a Competitive Inner City (ICIC), a market-driven model that will be tested in five Connecticut cities.

Bioscience-Connecticut United for Research Excellence, Inc. (CURE) has partnered with DECD to lead the bioscience cluster and to serve as a catalyst for future growth. CURE's goals include:

- a) stimulating the growth of bioscience companies and attracting bioscience companies to Connecticut;
- b) facilitating information exchange and communication within the cluster;
- c) publicizing the cluster's economic potential and contributions; and
- d) supporting the development of a skilled workforce.

Manufacturing-The manufacturing cluster has endorsed the Metro-Hartford Millennium Project's program of precision machining and tooling currently underway at Asnuntuck Community-Technical College. To date, this program has graduated 100 students with an additional 122 students in the pipeline.

The manufacturing cluster is also accepting proposals for two pilot programs designed to increase the number of high school and vo-tech graduates having the desired skills. Currently, Connecticut creates 2000+ manufacturing positions per year, but produces only 600 vo-tech graduates. Workforce development is a critically important activity within this cluster, as it is in others.

Finally, the manufacturing cluster will promote "lean and mean" manufacturing through seminars and consultations with individual companies.

Workforce Development Advisory Board-As just noted, workforce development is one of the key issues affecting Connecticut's continued ability to grow and prosper. To that end, DECD has developed Connecticut's Demand-Driven Workforce Development Plan. The objective of the plan is to develop, attract, and retain high quality workers and to establish a demand-driven training and education system. The Cluster Network Initiative will create and sustain needs-based networks of companies that will articulate their collective training and education needs. Early in 1999, DECD will distribute requests for proposals for the formation of pilot program Cluster Networks. A Workforce

Development Office will be established in DECD to oversee the pilot programs and to promote demand-driven workforce development.

Industry Cluster Bill for 1999-The Industry Cluster Bill for 1999 will include a number of measures to improve Connecticut's business climate. These include an extension of the net operating loss carry forward period, R&D tax rebates, and exemptions from income and dividend taxes for long term investments in small companies.

Transportation

Seaports-Connecticut has ports in Bridgeport, New Haven, and New London. Unlike most ports in the U.S., our ports are privately-owned, and, with the exception of the state pier in New London, do not receive state subsidies. Connecticut's ports benefit from a unique partnership between management and the union that provides for a productive and efficient workforce.

A study by the Connecticut Center for Economic Analysis indicates that elimination of the ports would have a major negative impact on Connecticut jobs, output, and quality of life due to increased roadway congestion. Currently, the Connecticut ports operate at or near capacity. The Connecticut Coastline Port Authority (CCPA) will present funding requests to the state legislature to expand and improve the ports, enabling them to provide further economic benefits to the state.

Aviation-Bradley Field is the second largest airport in New England and is scheduled for further expansion. Bradley operates as a freestanding economic unit that had a \$12 million carryover in 1998. Both passenger and freight traffic have increased in recent years.

New construction will begin in 2000 on a new \$135 million terminal to provide more gates. Parking, the largest revenue generator, is at capacity. Proposals are currently under review to expand capacity by adding a 4,000-space garage.

Ground Transportation-The current traffic on I-95 and Route 1 exceeds capacity. Problems with roadway congestion and delays, particularly during commuter hours, have negative effects on businesses and the economy in the southwest region. Congestion makes it difficult to attract additional companies to the region. In addition, commuter difficulties affect quality of life, making it difficult to attract and retain employees.

The Coastal Corridor Coalition, consisting of more than 20 organizations, was established to reduce rush hour congestion using a variety of means, including ridesharing, changes in transit fare structures, work schedule changes, and telecommuting. Members of the Coalition have a mandate to increase the range of choices available to their employees in an attempt to alleviate the problem of roadway congestion.

Dr. Ed Deak Fairfield University The New England Economic Project's Connecticut Outlook

Jobs-Job growth in Connecticut was relatively flat from January, 1998 through the third quarter. Nevertheless, the job market was tight with a 3.6% unemployment rate. People available for jobs do not necessarily have the required skills. As a result, many jobs in the state go begging.

The Asian Financial Crisis-It will continue to be difficult for Connecticut companies to sell internationally due to depressed demand in Asia. In addition, it will also be difficult for them to compete domestically due to the availability of low priced imports. The combination of these factors will probably produce job reductions, particularly in the manufacturing sector.

The Financial Services Industry-Connecticut continues to depend heavily on the financial services industry which employs a large number of people in the state. In addition, we benefit from Fairfield County residents who are employed by this industry in New York and in Fairfield County. The financial services industry is currently undergoing a consolidation that will result in further job cuts.

Residents in Connecticut also hold significant wealth in the stock market. The market was down dramatically during the third quarter of 1998. This could have a negative effect on consumer confidence and spending.

From 1989 through 1992, Connecticut lost 154,500 jobs. As of July, 1998, we had regained 121,200 or 78.4% of those jobs. Rate cuts by the Federal Reserve will provide some job stimulus in 1999, probably to the tune of 8,000-10,000 jobs.

From the fourth quarter of 1984 through the third quarter of 1996, Connecticut lost 143,600 manufacturing jobs. We have regained a few of these since 1996, but growth in this area will continue to be flat or negative. Alternatively, non-manufacturing jobs will provide the major source of job growth.

In spite of job losses, gross state product has increased. We grew high value-added, high income jobs. Job diversification into financial services and pharmaceuticals has paid off.

No Recession-During 1999 we will see a pause in the economy in Connecticut, although no one sees a recession. This will, in part be caused by the lack of available workers to provide growth. In addition, the national economy will slow down due to the effect of Asia and reduced spending for consumer and capital goods. Some industries, however, particularly pharmaceuticals, internet companies, software companies, and telecommunications will continue to flourish.

Dr. Steven P. Lanza Managing Editor, The Connecticut Economy University of Connecticut UConn s Connecticut Outlook

General Drift Indicator -The Connecticut Center for Economic Analysis has developed what it refers to as the GDI or "general drift indicator", which measures the state of the Connecticut economy both currently and prospectively. The Center has identified a coincident index, a collection of three variables measuring employment, income, and output, to measure current conditions. The coincident index is currently above where it was in 1988-89, signaling a strong economy. Although the labor force (employment) is down, both income and output are up.

Tight Labor Market-The lack of available labor restricts further job growth. We have a tight job market where jobs are growing faster than the available labor force. Job growth is continuing in the trade and services industries. Jobs have been declining in manufacturing and FIRE (finance, insurance, and real estate) since 1988, however.

High Incomes-Income continues to represent an area of strength for Connecticut. Personal income is 43% higher than the national average, making us first in the nation on this measure. Connecticut residents benefit from high wages in manufacturing and FIRE. Wages in the trade and services are rising as well. Income within the state is unevenly distributed, however, and becoming more so. The lowest two wage quintiles have fallen while the highest two quintiles have risen.

Strong Output-Output is also an area of strength. Gross State Product exceeds its 1988 level, but growth in GSP has lagged GNP growth at the national level. Connecticut's GSP has increased by 10% since 1988, while U.S. GNP has increased by 20%. The fact that state output rose although jobs did not, demonstrates the efficiency of Connecticut workers. Connecticut outperforms the United States in productivity, which is particularly high in FIRE, transportation, communications, and utilities, and is growing in manufacturing.

To summarize, we see a tight labor market and have experienced strong employment growth in recent years. The labor force limits further growth. Connecticut residents enjoy high and growing incomes. In addition, we have highly productive workers with high output per worker.

No Recession-Dr. Lanza turned the podium over to Mr. Stan McMillen, also from the Connecticut Center for Economic Analysis at UConn to discuss forecasting. According to Mr. McMillen, we will not lose jobs going forward, but will see slower job growth. Forecasts also show that GSP will continue to grow and that we will not experience a recession.

Dr. Edward Guay Wintonbury Risk Management World/National Outlook

This presentation began by referencing some of the financial shocks experienced since the August 17 default by the Russian government and the subsequent rescue of Long Term Capital Management. We can expect to see more such events over the next 12 to 18 months.

The economic expansion in the U.S. was fuelled by domestic demand combined with the liquidity benefits from a relatively easy financial system. Also, we have benefited from the reserve currency status of the dollar which has allowed us to receive inflows from the rest of the world, further exaggerating liquidity patterns in the domestic financial market.

Troubles in Asia-We have experienced nothing like the present expansion in the postwar period. Currently, however, Japan is in its worst postwar recession. It appears to be stabilizing, but at a low level. In spite of lifetime employment guarantees, Japanese consumers are insecure about spending. The banking system in Japan is grossly overleveraged due to financial and real estate speculation during the 1980s. The bulk of the Japanese banking system is insolvent. This is also true for Korea, Indonesia, and Malaysia.

In recent years we have experienced dramatic deceleration in worldwide inflation and few countries currently experience inflation as a problem. If a problem exists, it is the problem of excess capacity.

The U. S. has experienced unusual liquidity growth because of our reserve currency role. Deposits by foreign central banks at the New York Fed currently exceed \$600 million. These deposits have contributed to the financing of technology and investment spending in the U.S., but they have also contributed to the growth of hedge funds and other speculative activities.

Slower Growth Ahead -The Organization for Economic Cooperation and Development (OECD) forecasts slower growth for the U. S. Growth will slow from approximately 3½% this year to 1½% next year. Japan will show positive, but very low growth. The continental European economies will grow somewhat faster than the U.S., some faster, some slower. The U. K., for example, will slow even more than we do. The OECD also expects the Canadian economy to decelerate modestly next year.

One interesting aspect of the OECD forecast for the U. S. is that it reflects only a modest slowing in consumer spending; a drop to 2.9% in 1999 and 2.4% in 2000. Investment spending, on the other hand, will decline dramatically to 1% in 1999 before rising again in 2000.

The continued strength of consumer sending is unusual at this late stage of an economic expansion. The difference in this case is the credit and liquidity expansion that we have benefited from as a result of our reserve currency status. We are consumers for the world, using funds from the rest of the world.

Problems of Excess Capacity-Imports have grown rapidly and have taken a larger share of the U.S. economy. Simultaneously, exports have slumped because many of our traditional customers have experienced financial shocks. Excess capacity worldwide also hurt domestic suppliers. We will experience a large trade deficit next year; probably at an all-time high.

Strong growth in domestic demand offset the trade deficit. We have stimulated the economy through monetary expansion. Business investment spending has been phenomenal. A major part of this capital spending boom reflects new technology. Although new technology contributes to productivity and the development of future products and services, not all investment projects currently underway will succeed.

Currently, we are growing manufacturing capacity in the U.S. at the rate of 5% per year, well above the sustainable rate. Although domestic sales are slowing and we are losing market share to foreign competition, we are investing as if we will have our own market as well as the export market, thereby creating excess capacity. As a result, the operating rate of manufacturing has fallen dramatically.

Connecticut's unemployment rate is below the national level, but the national rate has stabilized and appears to be drifting up. Investment spending is a major source of employment. If that drops due to the excess capacity there will be employment effects.

Excessive Borrowing-Consumer durable and housing expenditures are at a record share of GDP, another unusual aspect of the current expansion. It is unusual to have an investment spending boom and a consumer durable/housing boom nationwide. Currently, consumers have heavy debt burdens, and they will not offset shocks or weaknesses that may occur elsewhere in the economy. In fact, consumers are borrowing against retirement and other assets in order to maintain their spending at a record level. This is the first time in the postwar period that we have had a negative consumer saving rate. In aggregate, consumers are spending more than their incomes.

Connecticut has benefited significantly from easier monetary policy and will continue to benefit in 1999. Housing and business values in the state lag those of the country as a whole and will benefit from lower interest rates. At the national level, however, additional rate cuts will not be as effective as they have been in the past. The only strategy that will maintain the long-term strength of the U.S. economy is an export-oriented strategy that balances trade and restores financial balance. That strategy is presently absent at the national level.

Lower Earnings Going Forward-The tight labor market creates narrower labor cost margins. In addition, operating rates decline in the face of excess capacity. Analysts'

profit estimates substantially overstate reality. Revenue growth has slowed as a result of deflation and loss of market share to foreign competition, but companies continued to report strong earnings per share until this year. During the next four quarters, the market still expects double digit gains of 12 to 17% in earnings per share. The economic data suggests, however, that it will be difficult to maintain zero change leading to vulnerability in the stock market and the U.S. economy.

Risks for 1999-2000-Investment spending and credit excesses are substantial in the U.S. and are contributing to a global capacity problem in a number of industries. Profits, unemployment, and the stock market are at risk. The negative saving rate poses a further risk for the domestic economy. If businesses cut investment spending to slow growth in capacity, it will produce layoffs and a decline in consumer confidence resulting in higher savings and a drop in consumer spending. Lack of consumer demand is a threat and a concern. Although the domestic economy is healthy right now, risks exist for 1999 and 2000.

Bill Kaufmann Senior Advisor, DECD Overview

The document **Industry Clusters; Progress Report October 1998** which outlines the current status and future directions for the cluster initiative was distributed. **The Governor s Council on Economic Competitiveness** will oversee continued progress on the clusters. Council members will include leaders from business, the state legislature, hospitals and health care, and higher education. Advisory Councils will be appointed below them. Current industry clusters include: financial services, telecommunications, high tech, manufacturing, health services, and tourism.

Other clusters are emerging, and part of the funding that the Legislature has made available will be used to seed emerging clusters.

The initiative relating to Urban Development was mentioned. A national search is currently underway to identify the best models, including models for urban entrepreneurship and urban education.

DECD is also continuing to work with Michael Porter from Harvard on the **Initiative for a Competitive Inner City** (ICIC). This market-driven model to develop cities will select five cities in Connecticut.

Debra Pasquale President, CURE Bioscience Cluster

Connecticut United for Research Excellence, Inc. (CURE) has partnered with DECD to serve as a convener and spokesperson for the bioscience cluster and to serve as a catalyst for its future growth. CURE is a non-profit educational organization with the mission: 1) to stimulate the growth of bioscience companies; 2) to facilitate information exchange; and 3) to foster the development of a skilled workforce.

CURE members include pharmaceutical companies, medical equipment and instrument companies, research firms, and biotechnology firms.

CURE believes that Connecticut will become a national leader in bioscience, thereby providing both social and economic benefits to the state. **CURE has identified four major goals for the bioscience cluster**: 1) to stimulate the growth of bioscience companies, to facilitate the formulation of new companies, and to attract companies from out of state; 2) to facilitate information exchange and communication among cluster members; 3) to publicize and promote the cluster's socioeconomic contributions and potential; and 4) to collaborate in the development of a skilled and entrepreneurial workforce.

Rita Zangari Deputy Commissioner, DECD Manufacturing Cluster

Ms. Zangari discussed some of the activities underway in the manufacturing cluster.

Retraining-The manufacturing cluster has endorsed the Metro-Hartford Millennium Project's program in precision machining and tooling currently underway at Asnuntuck Community-Technical College. To date, this program has graduated 100 students with an additional 122 students in the pipeline.

Labor force-Connecticut creates 2000+ manufacturing positions per year, but state votech schools only produce 600 graduates annually. Two \$200,000 grants will be awarded to pilot programs directed toward increasing the number of new graduates having the desired skills. Twenty-two proposals have been submitted. These will be reviewed, and a decision will be made on the pilot programs to be funded in December, 1998.

Improvements in productivity and competitiveness-The cluster has established the goal of increasing the use of technology to promote "lean manufacturing" and to create operating efficiencies. Seminars will be conducted and consultants will be available to help companies implement productivity-improving measures.

Mike Werle Workforce Development Advisory Board

Connecticut s Demand-Driven Workforce Development Plan was presented. The plan addresses workforce development needs. These include providing a high quality workforce by developing and attracting technology-oriented individuals and skilled individuals interested in manufacturing as well as by retaining Connecticut's "best and brightest". In addition, we need to continuously raise employee skill levels.

Guiding principles for the cluster include: 1) creating a demand-driven training and education system; 2) providing sustained leadership on the part of industry; and 3) reinforcing and/or redirecting existing efforts as required.

Cluster Network Initiative-Small and medium-sized businesses require a means to articulate their collective training and education needs. In response to that, the Cluster Network Initiative will create and sustain needs-based business networks. This initiative will employ a proactive approach to examine what other states are doing in the area of workforce development.

During the first quarter of 1999, proposals will go out for the formation of cluster networks. Each network must include 5 or more companies and must have a specific project plan and objectives as well as targets and measurements. Network proposals will be solicited through a variety of conduits, including regional workforce boards, CBIA, SACIA, CTC, MAC, and the community-technical colleges. Pilot programs will be identified and launched expeditiously.

Workforce Development Office-Since some management mechanism will be required to oversee the pilot programs, a Workforce Development Office in the Industry Cluster & International Division of DECD will be established. This office will advocate and promote demand-driven workforce development. The Workforce Development Office will also oversee implementation of the workforce development agenda and maintain operational relationships with key constituencies.

Paul Pescatello Special Counsel, DECD Legislative Agenda

Major points in the **Cluster Bill for 1999** were presented. The bill creates career opportunities for workers and improves Connecticut's business climate. A key to creating career opportunities is to attract small, mid-sized, and high-technology companies to Connecticut. Since these companies are often engaged in research and development, they frequently experience losses. The 1999 Cluster Bill extends the net operating loss carry forward (NOL) to 20 years from 5 years. Connecticut's current NOL period is the lowest in the nation. Studies show that increasing the NOL to twenty years has the effect of increasing both jobs and revenues.

The Cluster Bill also includes a provision for an R&D tax rebate that allows small companies to trade their tax credits for capital. Currently, many companies conducting significant R&D do not have income against which to use R&D tax credits. At the same time, these same companies need capital. The 1999 Cluster Bill allows companies with less than \$100 million in revenue to make a one-time election to carry forward an R&D tax credit or to trade it to the state for a payment equal to 90% of the R&D tax credit.

Finally, the bill includes an investor incentive designed to make Connecticut a favored rather than a disfavored location in which to incorporate or to move a business. The 1999 Cluster Bill freezes income derived from investment in small Connecticut companies from Connecticut's income and dividend taxes, if the investment is held for a minimum of five years.

DECD, the Connecticut Technology Council, United Technologies, and others are working with Price Waterhouse Coopers to study whether these proposals will pay for themselves and generate revenues for the state.

Martin Toyen CFO, Seaworthy Systems, Inc. Connecticut s Seaports

Unlike most ports in the U. S., the ports in New Haven and Bridgeport are privatelyowned and do not receive state subsidies. In addition, they pay property taxes to local communities. In New London, the state port is only a single-finger pier; this is the only part of the port system that receives state subsidies.

The management structure of Connecticut's ports is also relatively unique. The union, ILA, is part of management and owns properties that are in the ports. This partnership has created a strong, effective, and efficient workforce that may set precedents for other ports in the future.

Bridgeport-In Bridgeport, fruit is the primary import cargo. Bridgeport's locational advantage is its proximity (only 54 miles) to New York City. Therefore it can supply not only New England, but New York and New Jersey as well. Bridgeport has 2 refrigerated warehouses and 3 dry storage warehouses. It has ferry service to Long Island as well as Connecticut road and rail access.

New Haven-New Haven imports steel, much of it coming from Europe and eastern Europe. In addition, New Haven imports petroleum. Sixty percent of the petroleum used in Connecticut comes through New Haven Harbor. New Haven has 18 liquid bulk berths, 5 dry cargo berths, and 14 warehouses. It has a jet fuel pipeline to Bradley Airport, and it also has Connecticut road and rail access.

New London-New London handles primarily forest products. The New London port has been refurbished after being out of commission for approximately 10 years. As indicated above, it is a single-finger pier having 9 liquid bulk berths, 3 dry cargo berths, and 14 warehouses. There is high-speed ferry service and Connecticut road and rail access.

Connecticut ports are marketed cooperatively as Port Connecticut rather than in competition with each other. Major advantages include close proximity to New York, Boston, Montreal, Albany, and Philadelphia, and the availability of rail and highway access.

Economic Effect of the Ports-The Connecticut Coastline Port Authority has commissioned the Connecticut Center for Economic Analysis via DECD to study the economic impact of the ports on the Connecticut economy.

Stan McMillen from the Connecticut Center for Economic Analysis discussed the port study. The methodology will be to survey primary port service providers and their customers to determine the effect of eliminating the ports on employment, sales, and taxes. This data will then be aggregated by sector.

The elimination of the ports would have a major effect on the petroleum industry. Without the ports, petroleum products would have to be trucked or railed into the state which would increase costs. Some firms would leave the state due to higher costs and inability to compete with other regions. In addition, congestion effects would cause people to spend more time on the roads.

Because actual survey data are coming in slowly, the Center for Economic Analysis created some sample data using assumptions. These sample data were translated into negative shocks using a regional economic model. Results using the sample data indicate that, over a six-year timeframe, employment would decrease by almost 7,200 workers. In addition, population would continue to decline by 13,500 because of the effect of added congestion on quality of life. The local CPI would increase by almost half a percent due to higher petroleum prices. This would depress per capita income by 0.34%. There would be a substantial negative effect of subtracting the ports.

CCPA Strategic Plan-The Connecticut Coastline Port Authority's (CCPA) Strategic Plan includes both short-term and long-term goals and is a vehicle for communicating the value of the ports. One longer term goal is to use CCPA as a clearinghouse for state funding. Funding requests for the legislature include the following: 1) \$6 Million for Bridgeport to purchase waterfront land, fill and dredge property, and begin engineering to extend the bulkhead; 2) \$6.6-\$9.7 million for New Haven to extend rail access, purchase land currently owned by Yankee Gas, and realign streets; and 3) \$14.6-\$17.7 million for New London to purchase residential housing and to clear and pave property.

In response to a question about capacity of the ports, Mr. McMillen indicated that New Haven is at capacity. Bridgeport could add capacity, if it had more working space. New London could add capacity, if it had more storage. If more land were available, it would provide more berthing space and allow for more business, creating positive economic effects.

Commissioner Sullivan and Robert Juliano Aviation Infrastructure

Bradley Field is the second largest airport in New England, and there are plans for further expansion. Construction will begin in 2000 on a new \$135 million terminal. This will increase the number of gates from 23 to 30. The mix of planes will also change with a shift toward larger planes.

The airport operates as a freestanding economic unit that enjoyed a \$12 million carryover in 1998. Parking is the largest revenue generator, but is at capacity. Two proposals are currently being considered to add a 4,000-space garage for \$460-500 million.

Bradley has experienced good growth in passenger traffic, being up by 3-5%. This is partially due to the addition of three low-fare carriers who have increased competition.

Freight has also grown at Bradley for the last 3 to 4 years. Major shipping companies, including UPS, use Bradley. Further expansion is possible, since 3,000 acres of land are available for development.

Christopher J. Bruhl President, SACIA (Southwestern Area Commerce & Industry Association) Chairman, Coastal Corridor Coalition Ground Transportation

The current traffic on I-95 and Route 1 exceeds capacity. These roads have experienced rapid growth in usage over the last 25 years. About 40% of the state's workforce is in the southwest region. Currently, there is the need to improve the entire roadway system rather than addressing problems on a project-by-project basis. One problem is that adding roadway capacity in the coastal region is not feasible due to environmental, economic, political, and financial reasons. Alternatively, people need assistance in adapting to the existing system of roads, and load shifting needs to occur.

The Coastal Corridor Coalition consists of more than 20 organizations. They want to reduce rush-hour congestion on I-95, Route 1, and the Merritt Parkway by 5%. The real problem occurs during peak commuter periods. Multiple solutions are needed. These could include ride-sharing, changes in the mass transit fare structures, work-schedule changes, telecommuting, and so on. Some initiatives are already underway.

The Coastal Corridor Coalition is comprised of a stakeholder group that makes members accountable for their actions. Members have a mandate to increase the choices available to their employees including ride-sharing, bus ridership, train scheduling, and changes in work schedules. The Coalition wants a permanent working group to implement various options.

Mr. Bruhl was asked if the business leadership of the southwest region believes that congestion is an economic issue. He responded that it is, because excessive congestion affects quality of life, which is essential for attracting and retaining employees.